

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/001369

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A61K 38/17, A61K 38/22, A61K 35/54, A61K 35/78, C12N 5/00  
According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A61K, C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, BIOSIS, MEDLINE, EMBASE, REGISTRY,  
CHEM.ABS.DATA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 0038535 A1 (RURAL PATENT SVENSKA AB), 6 July 2000 (06.07.2000), page 5, line 34 - page 6, line 6, the claims --	1-4,14, 17-19,23-24, 34-37
X	WO 9708202 A1 (NECTIN AB), 6 March 1997 (06.03.1997) --	1-4,14, 17-19,23-24, 34-37
X	Hanner P. et al., "Antisecretory Factor: A Clinical Innovation in Ménière's Disease?", Acta Otolaryngol, August 2003, Vol. 123, pages 779-780, page 779, column 1, paragraph 2 --	1-4,14, 17-19,23-24, 34-37

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents

"A" document defining the general state of the art which is not considered to be of particular relevance

"B" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

18 January 2005

Date of mailing of the international search report

20-01-2005

Name and mailing address of the ISA/

Swedish Patent Office

Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Authorized officer

TERESE PERSSON/BS

Telephone No. +46 8 782 25 00

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/001369

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9727296 A1 (HSC RESEARCH AND DEVELOPMENT LIMITED PARTNERSHIP), 31 July 1997 (31.07.1997), abstract, page 2, lines 23-25; page 5, line 20 - page 6, line 2; page 15, line 7 - page 18, line 24; page 74 - page 75, line 20; page 77, line 24 - page 78, line 2; the claims --	1,14,17-19, 35-37
X	Lange S. et al., "The Antisecretory Factor: Synthesis, Anatomical and Cellular Distribution, and Biological Action in Experimental and Clinical Studies", International Review of Cytology, 2001, Vol. 210, pages 39-75, abstract; page 41, paragraph 1; page 60, paragraph 2 - page 62, paragraph 1; page 68, paragraph 3 --	1-4,14, 17-19,23-24, 34-37
X	WO 9640767 A2 (MITOTIX, INC.), 19 December 1996 (19.12.1996), abstract, page 12, line 39 - page 13, line 3; page 18, lines 6-15; page 28, lines 28-31; page 50, line 34 - page 51, line 6; SEQ.ID.NO. 6 --	1,17,35
X	WO 0105968 A1 (TUSZYNSKI, GEORGE), 25 January 2001 (25.01.2001), page 10, line 19 - line 32; page 14, line 24 - page 18, line 25; page 20, line 1 - line 10 --	1,17,35
X	WO 03063688 A2 (INCYTE GENOMICS, INC.), 7 August 2003 (07.08.2003), page 60, paragraph 4 - page 63, paragraph 1; page 74, paragraph 5; SEQ.ID.NO. 9 --	1,14,17-19, 35-37
X	CA 2433740 A1 (KEIO UNIVERSITY), 18 July 2002 (18.07.2002), page 12, lines 3-5; page 30, last paragraph, page 31, first paragraph --	1,17,35

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/001369

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	A. Eriksson et al, "Effect of Antisecretory Factor in Ulcerative Colitis on Histological and Laborative Outcome: a Short Period Clinical Trial", Scandinavian Journal of Gastroenterology, Vol. 38, 2003, pages 1045-1049, abstract  --	1-4,17, 23-24,34-35
P,A	Han Seok Ko et al, Ubiquilin interacts with ubiquitylated proteins and proteasome through its ubiquitin-associated and ubiquitin-like domains", pages 110-114  --	1-14,17-19, 23-37,41-42
P,A	BIOSIS, accession no. PREV200400196472, "Differential nuclear and synaptic expression of proteasome subunits: relevance to synapse-specific plasticity" & Society for Neuroscience Abstract Viewer and Itinerary Planner, (2003); Abstract No. 230.4  -- -----	1-14,17-19, 23-37,41-42

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE2004/001369

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 23-40  
because they relate to subject matter not required to be searched by this Authority, namely:  
Claims 23-40 relate to a method of treatment of the human or animal body by surgery or by therapy, as well as diagnostic methods /Rule 39.1(iv). .../...
2. ☒ Claims Nos.: 1-14 (partly), 15-16, 17-20 (p.), 22-33 (p.), 35-42 (p.)  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
.../...
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE2004/001369

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☐ in written format
    - ☒ in computer readable form
  - c. time of filing/furnishing
    - ☐ contained in the international application as filed
    - ☒ filed together with the international application in computer readable form
    - ☐ furnished subsequently to this Authority for the purposes of search
2. ☒ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE2004/001369

### Box II

#### II.1

Nevertheless, a search has been executed for this (these) claim(s). The search has been based on the alleged effects of the compounds and compositions.

#### II.2

Present claims 1, 4-14, 17-20, 22 and 35-42 relate to the use of a protein referred to as a "homologue". No definition of this expression is found in the description, except that the homologue should retain the same functional property as the antisecretory protein. Due to this expression a lack of clarity within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the whole claimed scope impossible.

Consequently, the search has been carried out for those parts of the claims which appear to be clear and concise, namely the Antisecretory Factor and protein S5a, also named Rpn10.

The present claims 1-13, 17-19, 23-33, 35-37 and 41-42 relate to an extremely large number of possible uses due to the very broad wording regarding the conditions to be treated. Support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the conditions claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible.

Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts related to the conditions mentioned in claim 14 and the conditions mentioned at page 17, lines 15-22 in the description.

Present claim 3, and dependent claims thereof, relate to the use of a food, a "antisecretory protein inducing food", which is defined by reference to a desirable characteristic, namely the ability to induce antisecretory protein. The claims cover all uses of such food as claimed in these claims, whereas the application provides support for only a very limited number of such foods. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lacks clarity (Article 6 PCT). An attempt is made to define the food by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. .../...

## INTERNATIONAL SEARCH REPORT

international application no.  
PCT/SE2004/001369

### Box II.2

Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the antisecretory inducing food SPC which is used in the experimental part of the description.

Present claims 15 and 16 are worded in such a way that it is impossible to understand the scope of the claims. This leads to a lack of clarity within Article 6 PCT to such an extent as to render a meaningful search of the claims impossible. No search has been carried out for these claims.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established will not be the subject of an international preliminary examination (Rule 66.1(e) PCT). This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT  
Information on patent family members

31/12/2004

International application No.

PCT/SE 2004/001369

WO	0038535	A1	06/07/2000	AT	283642	T	15/12/2004
				AU	754676	B	21/11/2002
				AU	3089900	A	31/07/2000
				BG	105607	A	29/12/2002
				BR	9916264	A	04/09/2001
				CA	2353138	A	06/07/2000
				CN	1330517	T	09/01/2002
				CZ	20012061	A	17/10/2001
				EA	4644	B	00/00/0000
				EE	200100322	A	15/10/2002
				EP	1139784	A,B	10/10/2001
				SE	1139784	T3	
				HU	0104556	A	28/03/2002
				IL	143716	D	00/00/0000
				JP	2002533106	T	08/10/2002
				NO	20012822	A	15/08/2001
				NZ	512049	A	29/08/2003
				PL	349076	A	01/07/2002
				SE	513496	C	18/09/2000
				SE	9804393	A	18/06/2000
				SK	8112001	A	07/01/2002
				TR	200101773	T	00/00/0000
				US	6537588	B	25/03/2003
				US	20030143284	A	31/07/2003
				US	20030143285	A	31/07/2003
				ZA	200104494	A	31/05/2002

---



## INTERNATIONAL SEARCH REPORT

Information on patent family members

31/12/2004

International application No.

PCT/SE 2004/001369

WO	9708202	A1	06/03/1997	AT	270305	T	15/07/2004
				AU	702589	B	25/02/1999
				AU	6893296	A	19/03/1997
				BG	63209	B	29/06/2001
				BG	102280	A	30/04/1999
				BR	9610308	A	21/12/1999
				CA	2230111	A	06/03/1997
				CN	1208420	A	17/02/1999
				CZ	9800520	A	16/09/1998
				DE	851876	T	12/11/1998
				DE	69632828	D	00/00/0000
				EA	1201	B	00/00/0000
				EE	9800055	A	17/08/1998
				EP	0851876	A,B	08/07/1998
				SE	0851876	T3	
				ES	2118683	T	01/10/1998
				HU	9900137	A	28/04/1999
				IL	123404	D	00/00/0000
				IL	152909	D	00/00/0000
				JP	11511972	T	19/10/1999
				NO	980743	A	16/04/1998
				NZ	316647	A	28/10/1999
				NZ	337380	A	23/02/2001
				PL	325114	A	06/07/1998
				SE	508609	C	19/10/1998
				SE	9502936	A	25/02/1997
				SI	851876	T	00/00/0000
				SK	23698	A	02/12/1998
				TR	9800304	T	00/00/0000
				US	6344440	B	05/02/2002
				US	20020099016	A	25/07/2002

WO	9727296	A1	31/07/1997	AU	732508	B	26/04/2001
				AU	1299297	A	20/08/1997
				CA	2244412	A	31/07/1997
				EP	0876483	A	11/11/1998
				JP	2000506375	T	30/05/2000
				US	5840540	A	24/11/1998
				US	5986054	A	16/11/1999
				US	6020143	A	01/02/2000
				US	6117978	A	12/09/2000
				US	6194153	B	27/02/2001
				US	6395960	B	28/05/2002
				US	6485911	B	26/11/2002
				AU	3251997	A	02/02/1998
				CA	2259618	A	15/01/1998
				EP	0914428	A	12/05/1999
				JP	2000516087	T	05/12/2000
				WO	9801549	A	15/01/1998

WO	9640767	A2	19/12/1996	AU	6153396	A	30/12/1996
----	---------	----	------------	----	---------	---	------------

## INTERNATIONAL SEARCH REPORT

Information on patent family members

31/12/2004

International application No.

PCT/SE 2004/001369

WO	0105968	A1	25/01/2001	AU	5627000	A	05/02/2001
				CA	2340721	A	25/01/2001
				CN	1335887	T	13/02/2002
				EP	1109900	A	27/06/2001
				US	6380161	B	30/04/2002
				US	20030180295	A	25/09/2003
				US	6429230	B	06/08/2002
				US	6696493	B	24/02/2004
				US	20020052415	A	02/05/2002
				US	20020198263	A	26/12/2002
-----							
WO	03063688	A2	07/08/2003	CA	2443334	A	17/10/2002
				CA	2459140	A	27/03/2003
				EP	1456365	A	15/09/2004
				WO	02081636	A	17/10/2002
				WO	03025131	A	27/03/2003
-----							
CA	2433740	A1	18/07/2002	EP	1350847	A	08/10/2003
				US	20040072265	A	15/04/2004
				WO	02055695	A	18/07/2002
-----							